Q&A for RSSB\_1987 Investigating train accident risk relating to train operations and rolling stock failures to improve industry risk management (T1101)

Please find below the questions and answers received from suppliers relating to the Invitation to Tender (ITT) documents for RSSB\_1987.

Thank you for submitting the questions and we look forward to receiving your tenders, by email to shareditt@rssb.co.uk by **12 noon 22nd October 2015.**

Best Regards,

Jenny Neill

Procurement Manager

RSSB

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| Reference | Question | Answer |
| 1 | Does RSSB have a split in mind in terms of the allocated budget between Phase 1 and Phase 2 of the Work Package? | There is no stipulated budget split between the two Phases, however as Phase 1 has a larger scope, RSSB anticipates tenders are likely to suggest around 60% for Phase 1 and 40% Phase 2 |
| 2 | Can you please clarify what you mean by the term “Deep Dive”? We interpret this term as a detailed analysis of the topic, looking at the causes and consequences in detail. However, Network Rail has used the Deep Dive approach previously and we want to confirm our understanding of the proposed process. | The depth is intended to signify both a deep examination of scope to ensure completeness (i.e. that all appropriate risk areas are included) and a deep examination of the causes, the consequences and the (actual or potential) countermeasures. |
| 3 | Section 3 of the Specification for the WP states that “a further Deep Dive review will be undertaken into train operations and train and rolling stock failures, following a similar approach to the previous Deep Dives”.  Is it possible to get a copy of one of these previous Deep Dive reviews to aid understanding the methodology to be adopted? | As the deep dive review reports are highly confidential, we will not be sharing these with potential bidders.  Please ask questions if you wish and we will do our best to answer these.  When the preferred supplier is decided, we will provide them with a copy upon signing our confidentiality declaration form. |
| 4 | What will the format of the data be that we will be required to clean and sort e.g. Excel?  Is it possible to get a sample of this data to be used, and an estimate of the number of records that will need to be analysed? | Part of the work will be based on well-ordered datasets such as SMIS, though analytical interpretation will be needed to meet the needs of the project. The work does however include seeking and using additional datasets which are beyond the scope of RSSB’s data management on behalf of the whole industry. These local datasets will be of a variety of styles and formats, having been designed for various other purposes, and it is anticipated that learning from them in this context may involve some data cleansing. |
| 5 | In terms of scoping and costing Phase 2 of the work, does RSSB have an idea of the number, and size, of the supplementary datasets which may be available for review? | It’s in the task itself to determine what opportunities there are to source data that can make a contribution here, so the number/size of the supplementary datasets is not fixed. Phase 1’s scope states “Engage with TOCs, FOCs and ROSCOs to assess availability and location of supplementary datasets…” as it will be important not to limit the sources to those already well known to RSSB. This industry engagement is an important aspect of achieving the required output. |
| 6 | Please can you provide copies of one or more of the Network Rail deep dive reviews referenced in the RFP? | Refer to question 3. |
| 7 | Regarding the required SMIS+ data requirements (page 15 of the RFP), what is meant by the term ‘workflow’? | The aim of this element is to document items required so that the SMIS+ system is fit for purpose in gathering data pertinent to the risk areas in question.  Workflows, here, are business processes that relate to the data entry task (mindful of what data are known at what stages during the unfolding of an event) and to handling the data once entered (such as notifying those who need to take action, routing the record to other organisations for augmentation at a later stage (or stages), maintaining the progress of actions required as a result of the event). In summary, what should happen as a result of the event being reported?  Reporting requirements, here, are the needs the SMIS+ users have from its business intelligence side; ensuring that the data specification is consistent with being able to report clearly and accurately on the issues pertaining to the risk area so that items can be collated, reported and monitored over time for analysis purposes.  Data migration, here, refers to the taking of data from one of any identified source systems (whether SMIS or an external data source) and reformatting it to fit into the structure of SMIS+. This work needs to provide a detailed position on the issues of migration in order that the analytical value from current data is maximised by the collation of a long-term dataset in the SMIS+ system. |
| 8 | Regarding the required SMIS+ data requirements (page 15 of the RFP), what is meant by the term ‘reporting requirements’? |
| 9 | Regarding the required SMIS+ data requirements (page 15 of the RFP), what is meant by the term ‘data migration’? |
| 10 | Please can you provide further detail of the expected content of the ‘detailed risk review’ deliverable? | The expected content (scope) for the ‘detailed risk review’ (both Phase 1 and Phase 2) are listed in the scope section of the specification. This should seek to generate a slide deck walking the reader through the findings of the work, setting out with clarity and evidence the determination of detailed risk scope, the approach taken, the results discovered and the conclusions drawn. |
| 11 | What format does the SMIS data currently take? (e.g. Excel, Access, other) | SMIS is stored in an Oracle database. |
| 12 | How many entries are there in the 10 years of SMIS data to be reviewed? | SMIS contains many events but there is a great difference in the event frequency depending on the specific type of event. Operational incidents (within scope) and rolling stock defects in SMIS can be expected to be around 20 events per month, but the data from other sources is not known at this point. |
| 13 | What is WILD? (section 5, scope, Detections of potential failures Phases 1 & 2) | This is a Wheel Impact Load Detector – a device that measures the force exerted on the rail by each wheel of a train as it passes, and activates an alarm if any is excessive. |
| 14 | It is stated that modifications were made to the PIM’s presentation of train accident risk.  Were these Did the Deep Dives for Network Rail result in any changes to the SRM? | No, the structure of the SRM has not yet been modified since that work was completed, but these are under consideration for the next update. |
| 15 | It is our understanding that SMIS is the only data source for the SRM and the PIM.   As such, no data extraction would be required from the PIM or SRM.  Is this correct? | Other sources are used in producing each of these models, and it is expected that it will be valuable to examine those at source. |
| 16 | What is the difference between near miss data in SMIS and data found in the Close Call System? | Close call is a very open system, allowing collection of unstructured data. SMIS is concerned with more structured data and uses specifically defined inclusion criteria. Close call will therefore accept any observed concern whereas SMIS has some rules for what constitutes a near miss. An example of a near miss in SMIS might be a train driver’s report that a track worker failed to achieve a position of safety in sufficient time. Whilst the judgement remains subjective, the situation is such that this kind of near miss should be reported via SMIS. |
| 17 | Step 2 of the review process suggests that data should be cleaned and sorted into categories relevant to the review.  There are a number of categories of incident and precursor event and category of analysis referred to in the specification.  Can you clarify which categories are relevant to the review? | Establishing the best categories for the deep dive would constitute part of the actual task, based on the proposed approach. |
| 18 | It is our understanding that SMIS data in scope for work package T1101-02 has already been categorised according to the SRM structure up to 30 September 2013.  As part of this project is there a requirement to repeat this task or is it to categorise according to a new set of categories, different from the hazardous events and precursors found in the SRM? | As with the prior question, the categorisation will be needed as best suits the deep dive itself. Prior categorisations will be available and may be reviewed, expanded, reworked as the project needs dictate. |
| 19 | Is the risk from On Track Machines included in the scope of work package T1101-02? | Yes, OTMs are within the “train” definition for this work. |
| 20 | Please clarify the significance of the last three bullets under ‘Undertake analysis of key trends in the available information’: | * Causes and consequences of accidents using a ‘bow-tie’ approach: The examination of both causal and consequential parts of safety losses based on their mutual connection with the specific safety loss scenarios. * Mitigation/control measures to reduce the safety loss due to accidents: Understanding the effect of these measures on the overall risk and how they are designed to, or can be demonstrated to, reduce it. * FMEA of significant causes of accidents: Understanding the link between possible failure modes and their effect on the likelihood or severity of any subsequent outcome. |
| 21 | In section 10.1 SMIS+ programme is listed as an ongoing project the supplier of this project should be aware of but is not expected to have a significant bearing on the progress or outcome of this project.  However section 4 of the Phase 1 review process outlines the steps for delivering SMIS+ requirements document.  Can you confirm the nature of the dependency and any overlap between this project 1987 and the SMIS+ project? | Part of the output of this project will form an input to the work of SMIS+. It is crucial that the knowledge gained from the deep dive analysis is captured in a way that contributes to the development of a SMIS+ that will be positioned to collect the correct data to allow monitoring of the important causal and consequential aspects which emerge from this work. The output is required to follow the templated approach which is being used to gather the requirements in other risk areas. Work based on the successful delivery of such output falls to the SMIS+ project rather than this one. |
| 22 | SPADs are clearly stated as out of scope for this project.  Does this include SPADs due to rolling stock failures and SPADs in which human factors associated with the TOC/FOC driver? | SPADs, as events in themselves, are excluded; however their place in the context would be expected to be acknowledged. That is, if an area of train operation or failure is anticipated to increase SPAD likelihood that should be discussed; while a full analysis of all the human factors leading to SPADs is not required within this project. |
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